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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/017,740 | 12/14/2001 | Richard A. Meyer | M93.12-0247 | 8802 |

7590 12/30/2003
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EXAMINER

MARTIR, LILYBETT

ART UNIT PAPER NUMBER

2855

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,740

Applicant(s)

MEYER ET AL.

Examiner

Lilybett Martir

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 29-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 29-33, 35 and 36 is/are rejected.
- 7) ☒ Claim(s) 6, 9-11, 34 and 37-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because the lines utilized in the depictions are too thin, and therefore make it difficult to appreciate the details on said depictions. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-8, 29-33 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommerfeld et al. (Pat. 5,969,268) in view of Gruber (Pat. 3,033,031) and further in view of Larsen et al. (Pat. 6,324,919).

- With respect to claims 1 and 29, Sommerfeld et al. teaches a first sensor support assembly having a rigid central hub 14 having an end plate and a support element extending transversely from the end plate; and a rigid annular ring 16 concentric with the central hub 14 as noted in Figures 1 and 5; a mount 87 joined to the end plate of the first sensor support

assembly, the mount being spaced apart from and extending in the same direction as the support element of the first sensor support assembly; a first plurality of sensing devices 21-24 operably coupled between the support element of the first sensor support assembly and the corresponding annular ring. But he does not teach the rigid central hub having an end plate and a support element extending transversely from the end plate, a second sensor support assembly, a second plurality of sensing devices operably coupled between the support element of the second sensor support assembly and the corresponding annular ring, and wherein the end plates of the first and second sensor support assemblies are joined together. Gruber teaches two measuring devices which are joined by means of element 16 by their end plates. Larsen teaches a load transducer that comprises an annular ring 30 concentric to it having an end plate, and a support element 130 extending transversely from the end plate. Since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8), it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the load cell of Sommerfeld et al. utilizing the teachings of the measuring devices of Gruber by duplicating the number of measuring arrangements being provided to make the measurements made by said load cell device more accurate and reliable. It would have been obvious at the time the invention was made

to a person having ordinary skill in the art to modify the load cell of Sommerfeld et al. as modified by Larsen and further utilizing the teachings of the load transducer of Larsen by providing it with a support element extending transversely from the end plate of his annular ring to make a device more stable and facilitate the attachment of said transducer therefore making said device versatile.

- With respect to claims 2 and 30, Sommerfeld teaches the central hub 14, the annular ring 16 and sensing devices 21-24 of the sensor support assembly being integral as noted in Figures 1 and 5.
- With respect to claims 3 and 31, Sommerfeld teaches the sensing device formed by an integral radial tube 21-24 with sensors 44 operably coupled thereto.
- With respect to claims 4-5 and 32-33, Sommerfeld teaches a sensor support assembly includes an integral flexure member 31-34 extending between an end of each radial tube 21-24 to at least one of the annular ring 16 and central hub 14, the flexure member being compliant for displacements of each corresponding radial tube along the corresponding longitudinal axis (Col. 2, lines 64-67), as noted in Figures 1 and 5.
- With respect to claims 7 and 35, Sommerfeld teaches the utilization of a mount 87 but he fails to teach a second mount joined to the end plate of the second sensor support assembly, the second mount being spaced apart from and extending in the same direction as the support element of

the second sensor support assembly. Since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8), it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the load cell of Sommerfeld et al. utilizing the teachings of the measuring devices of Gruber by duplicating the number of measuring arrangements being provided to make the measurements made by said load cell device more accurate and reliable.

- With respect to claims 8 and 36, Sommerfeld teaches an end plate and the first-mentioned mount 87 includes a bore as noted in Figures 1 and 5; the bores being aligned to form a common bore through the load cell. Sommerfeld fails to teach the utilization of a second mount which also has a bore. Since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8), it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the load cell of Sommerfeld et al. utilizing the teachings of the measuring devices of Gruber by duplicating the number of measuring arrangements being provided to make the measurements made by said load cell device more accurate and reliable.

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Allowable Subject Matter

4. Claims 6,9-11,34 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the limitations of said claims are inserted in the base claim, including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 9:00 AM to 5:30 PM.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (703)305-4816. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3432.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

CM

Lilybett Martir
Examiner
Art Unit 2855

ELW

ELW
EDWARD LEFKOWITZ
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